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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/752,817	01/03/2001	Shunpei Yamazaki	12732-003001/US4564	9971

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EXAMINER	
BELL, PAUL A	

ART UNIT	PAPER NUMBER
2675	16

DATE MAILED: 02/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/752,817	YAMAZAKI ET AL.	
	Examiner	Art Unit	
	PAUL A BELL	2675	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 December 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *5-39* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *5-39* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *12,15*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 5, 7-10, 12, 13-15, 17-20, 22-26, 28-31, 33-37 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al. (6,265,833) in view of Yamada et al. (5,990,629).

With regard to claim 5 Kim et al. teaches a display system comprising: a light-emitting device (figure 1, item 5) comprising plurality of pixels, each of said plurality of pixels having at least an EL element (column 1, lines 10-16 and column 9, lines 57-63); a sensor for obtaining an information signal of an environment (figure 1, item 1); a CPU for converting an electrical signal supplied from said sensor into a correction signal (figure 1, item 3); and a voltage changer for controlling a corrected potential based on said correction signal (figure 1, item 4).

With further regard to claim 5 Kim et al. does not illustrate the details of his EL display "item 5" device such as "wherein said voltage changer is electrically connected to the EL element of each of the plurality of pixels via a switch, and wherein said switch is turned off during an addressing period and is turned on during a sustaining period" .

Yamada teaches; "wherein said voltage changer is electrically connected to the EL element of each of the plurality of pixels via a switch and wherein said switch is turned off during an addressing period and is turned on during a sustaining period", (See Yamada et al. figures 19, 22, and 23 items S2 and PS and further SEE column 32, lines 49-67, column 33, lines 1-26, column 35, lines 37-52, column 59-67, column 36, lines 1-5, 49-67), note applicant illustrates in figure 1, item 2015 a simple circuit breaker which function to connect or disconnect the voltage changer from the EL elements and has no control over what the value of the voltage changer is.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the EL matrix display details as illustrated by Yamada when implementing the system items 4 and 5 of Kim et al. because Kim et al. lacks these specific manufacturing details directed towards the actual EL circuit within the display therefore one of ordinary skill would have been motivated to simply use Yamada et al. when implementing items 4 and 5 system parts in the Kim et al. system illustrated, and further Yamada et al. gives motivation in column 2, lines 10-16 for using his details.

With regard to claim 7 the combination of Kim et al. and Yamada et al. teaches a display system according to claim 5, wherein said light-emitting device, said sensor, said CPU and said voltage changer are formed on a same substrate (See Kim et al. since figure 1 illustrates all the claimed parts in one illustration it is obvious that they are capable of sharing a common surface (substrate) while enclosed above said common surface of an enclosure).

With regard to claim 8 the combination of Kim et al. and Yamada et al. teaches a display system according to claim 5, wherein said light-emitting device is an EL display device (See Kim et al. figure 1, item 5, column 1, lines 10-15).

With regard to claim 9 the combination of Kim et al. and Yamada et al. teaches a display system according to claim 5, wherein said display system is incorporated in one selected from the group consisting of a video camera, a digital camera, a head-mount display, a car navigation system, a portable telephone, an image reproduction apparatus, a car audio equipment, and a personal computer (See Kim et al. column 10, lines 21-34 and further these specific uses of the display are viewed as merely being recitations directed towards an □OBVIOUS INTENDED USE□ of the display).

With regard to claim 10 the combination of Kim et al. and Yamada et al. was shown above to read on most of these limitations and in addition the combination of Kim et al. and Yamada et al. teaches an EL element having two electrodes with an EL layer interposed there between (see Yamada et al. figure 21) ; a current control TFT electrically connected to one of said two electrodes of said EL element (see Yamada et al. Figure 19, item 12), wherein a potential applied to the other of said two electrodes of said EL element (figure 19, item Z).

With regard to claim 12 these limitations were addressed in claim 9.

With regard to claim 13 the combination of Kim et al. and Yamada et al. was shown above to read on most of these limitations and in addition the combination of Kim et al. and Yamada et al. teaches said thin film transistor comprising at least an active layer, and a gate electrode adjacent to said active layer with a gate insulating film

interposed there between ; an EL element comprising at least an EL layer between an anode and a cathode, one of said anode and said cathode being electrically connected to said active layer (See Yamada et al. figures 19, 20, and 21).

With regard to claim 14 these limitations were addressed in claim 7.

With regard to claim 15 the combination of Kim et al. and Yamada et al. suggest an active matrix display device according to claim 13, wherein said sensor comprises a CCD or a photo-diode (See Kim et al. figure 1 item 1 an optical sensor responsive to light and since CCD or a photo-diode are both conventional they would have been an obvious choice to one of ordinary skill) .

With regard to claim 17 these limitations were addressed above in claim 9.

With regard to claims 18-20, 22-24, 26, 28-31, 33-35, 37, and 39 the combination of Kim et al. and Yamada et al. were shown above to read on these limitations.

With regard to claims 25 and 36 the combination of Kim et al. and Yamada 25 suggest an active matrix display device according to claim 23, further comprising an A/D converter interposed between said sensor and said CPU, and a D/A converter interposed between said CPU and said voltage changer (See Kim et al. figure 1 it is inherent that the CPU controller uses A/D for it's input and D/A for its output while interfacing with analog devices shown).

3. Claims 6, 11, 16, 21, 27, 32 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Kim et al. (6,265,833) and Yamada et al. (5,990,629) in view of Poulton (5,702,323).

With regard to claims 6, 11, 16, 21, 27, 32 and 38 the combination of Kim et al. and Yamada et al. does not teach "wherein said information signal comprises a user's living-body information".

However Poulton teaches, "wherein said information signal comprises a user's living-body information" (abstract, figure 5, item 230, column 2, lines 48-57, column 4, lines 3-10).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the optical sensor item 1 as illustrated by Kim to also keep track of body parts position as done by Poulton when implementing the system item 1 of Kim et al. because this limitation is merely directed towards an "OBVIOUS INTENDED USE" , of the combination of Kim et al. and Yamada et al. as illustrated by Poulton, and further Poulton gives motivation in column 1, lines 5-10 for modifying the use the Kim item 1 which Poulton provided a further illustration of a additional "use" for the information given by a optical sensor.

Response to Arguments

4. Applicant's arguments (paper # 14 received 11 December 2003) with respect to claims 5-39 have been considered but are moot in view of the new ground(s) of rejection. In view of amendments, the new reference Yamada et al. (5,990,629) was added for a new ground of rejection. Yamada et al. clearly shows "connecting a voltage changer to the EL element of each pixel via a switch, and wherein said switch is turned off during an addressing period and is turned on during a sustaining period". The examiner references the detailed rejection above.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Bell whose telephone number is (703) 306-3019.

If attempts to reach the examiner by telephone are unsuccessful the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377 can help with any inquiry of a general nature or relating to the status of this application.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

Or Faxed to: (703) 872-9306

Or Hand-delivered to: Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist)

Paul Bell
Art unit 2675
February 18, 2004

CHANH NGUYEN
PRIMARY EXAMINER